

## ATTACHMENT I

### GUIDELINES AND SAMPLE TEMPLATES FOR DATA DEFINITIONS AND CONTROL PROCEDURES

#### GUIDELINES:

A Data definition should include both conceptual and operational components. It should contain the necessary information to clearly understand the measure and include a detailed description of its calculation to allow for replication. Additionally, a complete data definition should fulfill the following criteria:

- Describes the primary source(s) of information, its method of collection and storage.
- Identifies any data limitations, including factors beyond the agency's control.
- Identifies whether the data is cumulative or non-cumulative.

Control procedures create a system to ensure the collection and reporting of performance measures are reliable and accurate. A statement of control procedures should include detailed information regarding data collection and review and list responsible parties. Examples of three types of control procedures follow:

*Input controls* are processes developed by an agency to provide reasonable assurance that data collection is accurate. Examples include:

- Data-entry training, including how the information will be used and the importance of accuracy.
- Written and established guidelines and procedures for data entry that are used consistently.
- Information received through the mail or by telephone that is date stamped or logged when received.
- Supervisory review of information entered into the computer system for accuracy.
- Obtain written documentation of the control structure from third-party data providers.
- Documentation of the third-party provider's operations to ensure that the information received is accurate.

*Process controls* are mechanisms to provide reasonable assurance that performance measurement systems use the appropriate information and follow procedures established for data gathering and calculation of each measure. Examples include:

- Review computer programs used to calculate or store performance data to ensure the correct information is being captured and the desired functions are being performed.
- Databases should have all of the basic computer controls such as edit checks, logic checks, edit totals, and access controls.
- Personnel should understand the origin of the information and stay current with any changes in its form.
- Written procedures for collecting and calculating measures should exist and personnel should be trained in this area.

*Review controls* are procedures to verify that an activity occurred and was correctly calculated to provide reasonable assurance that accurate data is reported.

- Communicate with executive management to ensure that the desired information is being measured or is capable of being measured.
- Review calculation of the performance data to ensure that the calculation is consistent with the measure definition and to check for mathematical errors.
- Conduct internal audits of performance measures.
- Review MFR submission for accuracy and any typographical errors.

Source: Texas State Auditor's Office. "Guide to Performance Measurement Management 2000 Edition" <http://www.sao.state.tx.us/Resources/Manuals/prfmguide/default.html>



**Strategies**

1.1.1  
1.1.2

**Frequency****Issues/Action Items****FY 2006 Performance – \*Required**

Source: Maryland Dept. of Transportation, MdTA, December 2005

## ATTACHMENT I (Continued)

### SAMPLE TEMPLATE #2

Program name: [REDACTED]

GOAL [REDACTED]

[REDACTED]
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INDICATOR [REDACTED]

<u>Short name:</u> [REDACTED]	<u>Indicator Type:</u> [REDACTED]	<u>Balanced Scorecard perspective:</u> [REDACTED]
<u>Complete written description of the indicator:</u> [REDACTED]		
<u>Definitions:</u> [REDACTED]		

### SOURCES OF DATA

<b>From automated data base reporting systems</b>		
<u>Data base name:</u> [REDACTED]	<u>Data element name:</u> [REDACTED]	<u>Data element code:</u> [REDACTED]
<b>From documents in hard copy or on personal computer</b>		
<u>Document name / file location:</u> [REDACTED]	<u>Data element name:</u> [REDACTED]	<u>Location in the document:</u> [REDACTED]
<u>Contact person's name and phone number:</u> [REDACTED]		

### DATA COLLECTION

[REDACTED]
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### COMPUTATION OF MEASURE(S)

[REDACTED]
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### BENCHMARKS

[REDACTED]
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### DATA ACCURACY / RELIABILITY

[REDACTED]
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### ISSUES

[REDACTED]
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Source: Dept. of Human Resources, November 2005

## ATTACHMENT I (Continued)

### SAMPLE TEMPLATE #3

#### M00F04.01 AIDS ADMINISTRATION

##### DATA DEFINITION AND CONTROL PROCEDURES

**Goal 2.** Reduce the incidence of HIV/AIDS in Maryland.

**Objective 2.1** During CY 2006, HIV cases will continue to decline from the CY 2003 level.

Performance Measures	2003	2004	2005	2006
	Estimated	Estimated	Estimated	Estimated
<b>Input:</b> Number of new HIV cases	2,222	2,172	2,123	2,074
<b>Outcome:</b> Percent change	N/A	-2.25%	-2.26%	-2.31%

##### Data Definition

Data used: HIV cases reported through December 31, 2003.

Program used: SAS program.

Steps taken:

- 1) Calculate the annual number of HIV cases diagnosed each year, 1994-2002, regardless of later AIDS diagnosis. The weighting variable is used to adjust the raw number of cases in four ways: First, adjusting upwards for unusable lab reports (the number of HIV+ lab reports used each year divided by the total number of HIV+ lab reports). Second, distributing cases, which are reported by ZIP code, to counties (multiplying by the distribution of AIDS cases in each ZIP code across county lines). Third, annualizing cases from 1994, the first year of reporting (the number of cases reported June through December 1994 divided by 7 and multiplied by 12. And fourth, increasing the most recent quarter to account for delays in reporting (the number of cases reported in the last quarter divided by 2.5 and multiplied by 3).
- 2) Plot a linear regression line through the annual number of HIV cases, 1995-2002. The independent variable is the year and the dependent variable is the number of HIV cases. The beta coefficient provides the annual increase in cases per year.
- 3) Estimate the expected number of HIV cases for the years 2003-2006. Add the annual increase to the expected value for the current year to get the estimate for the following year. Note that the expected value for the current year is not necessarily the same as the observed value for the current year. Repeat for each successive year.
- 4) Calculate the percent decline from the prior year by subtracting the number of HIV cases for the current year from the number of HIV cases from the prior year, dividing that result by the number of HIV cases from the prior year and multiplying that result by 100.

## **ATTACHMENT I (Continued)**

### **Control Procedures**

HIV and AIDS cases are reported by physicians, health care facilities, laboratories, local health departments, and other state health departments to the AIDS Administration's Center for Surveillance. They are also reported as a result of fieldwork and other investigations of the Center for Surveillance and the Center for Epidemiology and Health Services Research. Information on cases is stored in file cabinets and on computers in a secure area at the AIDS Administration. This includes cumulative case reports dating back to 1981. Case reports may come in years after the actual event occurred. Therefore, the date of report is not the same as the date of diagnosis and the number of cases reported in a year is different from the number of cases diagnosed in the same year. In addition, new information may be reported at any time that changes either the status of the case (HIV, AIDS, or non-HIV/AIDS) or the date of diagnosis. To handle this, analyses are performed on "frozen" datasets that include all information as reported to the AIDS Administration through a specific date.

Source: Dept. of Health and Mental Hygiene, July 2005